

## Welcome and Introductions

Dushanka V. Kleinman, DDS, MScD

I am delighted to welcome you to the NIH Consensus Development Conference on the Diagnosis and Management of Dental Caries Throughout Life. I bring you greetings from our Director, Dr. Lawrence Tabak, and from our staff. The National Institute of Dental and Craniofacial Research is pleased to be a primary sponsor of this meeting, together with the NIH Office of Medical Applications of Research (OMAR). We also appreciate the support of our co-sponsors, the National Institute on Aging and the US Food and Drug Administration.

The National Institute of Dental and Craniofacial Research has participated in numerous consensus development conferences since the NIH initiated this process in the mid-1970s. These conferences have examined the use of restorative devices, surgical procedures, and preventive interventions among others. Specifically, past consensus conferences have looked at the use of dental implants, removal of third molars, dental sealants in the prevention of tooth decay, anesthesia and sedation in the dental office, health implications of smokeless tobacco use and the oral complications of cancer therapies. In addition, we have held technology assessment conferences on the health effects of dental restorative materials and the management of periodontal diseases and of temporomandibular disorders.

There are many ways in which topics emerge for consideration as consensus development conferences. I know that Dr. Barry Kramer will address the general process. The topic of this conference was proposed by our Institute to the NIH (and accepted) in 1999. We felt that it was time to review the basic diagnostic and management approaches to this highly prevalent, infectious disease, a disease that remains a problem for many Americans of all ages. The knowledge base of the etiology and pathogenesis of this disease was at a turning point and new approaches to disease management and diagnosis were emerging.

I understand that there are over 800 attendees to this conference. In addition, others will be joining us through the live broadcast on the Internet (<http://odp.od.nih.gov/consensus/cons/115/115.htm>). This reflects the interest that this disease generates. Dental caries is one of the most common diseases of childhood, five times more common than asthma, and seven times as common as hay fever. Even today it is relatively rare to find someone who has not experienced dental caries. However, there are disparities seen between poor and non-poor individuals throughout life for this disease, and minority race/ethnic groups are disproportionately affected. Although there has been major progress in preventing this disease over the past fifty years, there is much work to be done.

The recent Surgeon General's report, *Oral Health in America*, documented the burden of oral diseases—including dental caries—and their relation to general health and

well-being. These diseases “can interfere with vital functions such as eating, swallowing, and speaking...and daily living such as work, school and family interactions. They also undermine self-image and self-esteem, discourage social interaction as well as incur great financial cost.” The financial costs are significant. For the year 2000 national dental expenditures are estimated to total approximately \$60 billion dollars.

Visibility and emphasis to the prevention of dental caries is included in the nation’s *Healthy People 2010* health promotion and disease prevention objectives. These objectives include ones focused on achieving dental caries reduction in children, adolescents and adults, in reducing the proportion of our population with untreated disease, and in increasing exposure to fluorides and sealants.

As mentioned in your program, the purpose of this conference is to address six key questions that will be presented by Dr. Alfano, the chair of the independent consensus panel. During the next few days we all will have the privilege of hearing from experts who have reviewed the published literature and from members of the audience. Ultimately, the consensus panel will provide a statement addressing answers to these questions on the last day.

As we proceed it is important to realize that the findings of each consensus development conference provide guidance for a given period of time. Periodically the emerging knowledge base is reviewed to determine whether this audience requires revision. The investment in science and research training related to dental caries continues. Current research includes investigations that range from studies of the influence of the biofilm on microbial gene expression and function, to those developing approaches to risk assessment, prevention and early diagnosis. We hope that this research will provide us with additional capacity to address this disease in the future.

The conception and development of a consensus conference requires foresight, incredible energy, effort and patience. Our institute is particularly grateful to the members of the organizing committee, the discussants, independent reviewers, panel members, and the panel chair, Dr. Michael Alfano for their commitment and contributions. We also are appreciative of the contributions of the RTI/UNC Evidence-based Practice Center, and especially Dr. Jim Bader, who lead the development of the systematic review that we will hear during this conference. This Center’s activities are a result of a partnership between our institute and the Agency for Healthcare Research and Quality. I would like to thank Dr. Isabel Garcia, Special Assistant for Science Transfer, our liaison to the Office of Medical Applications of Research and our project officer for the Evidence-based Practice Center that conducted the systematic review.

Dr. Amid Ismail’s support in training of the independent reviewers and that of the University of Michigan staff also was invaluable. Here in Bethesda, our gratitude goes to Mr. Jerry Elliott (Program Analyst and Management Officer) and Dr. Barry Kramer, Director, Office of Medical Applications Research. OMAR assures that the protocol used for CDC is carefully followed. We appreciate their guidance. Finally, my gratitude and thanks go to Dr. Alice Horowitz, Senior Scientist, NIDCR, who has served as the

primary institute liaison for this conference, and who has worked tirelessly and creatively for the past several years to get us to this point.

Thank you Alice!